A photograph of an industrial construction site, likely an oil refinery or chemical plant. In the foreground, a large red crane is visible on the left, and a worker in a hard hat and work clothes stands on a platform to the right. The background is filled with complex metal structures, pipes, and other industrial equipment. The overall scene is one of active industrial construction.

AR35

Imperial Oil Limited Annual Report 1971

**Advance copy
not to be released
until Tuesday,
April 4, 1972**

Imperial Oil Limited Annual Report 1971

Directors

J. A. Armstrong
J. A. Cogan
J. W. Flanagan
J. W. Hamilton
J. H. Hamlin
J. G. Livingstone
R. G. Reid
R. S. Ritchie
W. O. Twaits
L. D. Fraser⁽¹⁾
J. F. Mathis⁽²⁾
V. Taylor⁽³⁾

⁽¹⁾ Retired August 31, 1971
⁽²⁾ Transferred to Affiliate June 30, 1971
⁽³⁾ Retired May 27, 1971
⁽⁴⁾ Elected Director and Senior Vice-President September 1, 1971

Officers

Chairman of the Board and Chief Executive Officer
W. O. Twaits

President
J. A. Armstrong

Senior Vice-Presidents
J. A. Cogan
J. W. Flanagan
J. W. Hamilton
J. H. Hamlin
J. G. Livingstone

R. G. Reid
R. S. Ritchie
L. D. Fraser⁽¹⁾
J. F. Mathis⁽²⁾
V. Taylor⁽³⁾

Vice-Presidents
W. D. Archbold
D. D. Loughheed
A. G. Moreton
V. Sirois
R. G. Reid⁽⁴⁾

General Secretary
G. M. Henderson

Comptroller
G. R. McLellan

Treasurer
D. W. McGibbon

General Counsel
J. F. Barrett, Q.C.

Imperial Oil Limited was incorporated under the Canada Joint Stock Companies Act, 1877 on September 8, 1880. Its head office is at 111 St. Clair Avenue West, Toronto 7, Ontario.

Principal subsidiaries of Imperial are: Atlas Supply Company of Canada Limited, Building Products of Canada Limited, Champlain Oil Products Limited, Home Oil Distributors Limited, Imperial Oil Enterprises Ltd.

Principal investments and percentage interest in other companies are: Interprovincial Pipe Line Company, 33; Trans Mountain Oil Pipe Line Company, 8.6; Montreal Pipe Line Company Limited, 32; Rainbow Pipe Line Company, Ltd., 33.3; Tecumseh Gas Storage Limited, 50; Syncrude Canada Ltd., 30.

Imperial Oil Limited shares may be transferred at the following offices: head office of Imperial Oil Limited; principal offices of Montreal Trust Company at Halifax, N.S., Montreal, Que., Toronto, Ont., Winnipeg, Man., Regina, Sask., Calgary, Alta., Vancouver, B.C.; Bankers Trust Company, New York, N.Y.

The annual meeting of shareholders will be held at 11:00 a.m., Monday, April 24, 1972 in the Canadian Room, Royal York Hotel, Toronto, Ontario.

Front Cover: New lubricating oil facilities under construction at Sarnia, Ont. The project will increase the refinery's lubricating oil manufacturing capacity by 50 per cent. Opposite page: Drillers at work at the company's Taglu G-33 well on Richards Island, N.W.T. The well discovered natural gas in June, 1971.

Imperial's directors are also full-time employees of the company. Pictures in this report show them on field trips or in discussion at the head office with senior management.

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| Ten-year Summary | 9 |
| Operations Review | 16 |

Highlights

| Financial | 1971 | 1970 | Operating | 1971 | 1970 |
|--------------------------------------|----------------------------|-------|--------------------------------------|---------------------------------------|-------|
| | <i>millions of dollars</i> | | | <i>thousands of barrels per day</i> | |
| EARNINGS | 136 | 105 | PETROLEUM PRODUCT SALES | 406 | 400 |
| SHAREHOLDERS' DIVIDENDS PAID | 77 | 68 | CRUDE OIL PROCESSED AT REFINERIES | 412 | 406 |
| REVENUES FROM ALL SOURCES | 1,941 | 1,711 | CRUDE OIL AND NATURAL GAS LIQUIDS | | |
| CAPITAL AND EXPLORATION EXPENDITURES | 161 | 122 | gross production | 213 | 199 |
| TAXES CHARGED AGAINST INCOME | 157 | 129 | net production | 183 | 170 |
| TOTAL TAXES GENERATED | 402 | 368 | NATURAL GAS | <i>millions of cubic feet per day</i> | |
| | <i>dollars</i> | | gross production | 433 | 412 |
| EARNINGS PER SHARE | 1.06 | .82 | net production | 365 | 349 |
| DIVIDENDS PER SHARE | .60 | .52½ | GROSS RECOVERABLE RESERVES* | | |
| | <i>percentages</i> | | crude oil and natural gas liquids | | |
| EARNINGS CHANGE FROM PREVIOUS YEAR | 30.1 | 11.6 | (millions of barrels) | 1,489 | 1,567 |
| EARNINGS AS A PERCENTAGE OF | | | natural gas (billions of cubic feet) | 3,188 | 3,328 |
| SHAREHOLDERS' INVESTMENT | 13.6 | 11.0 | | | |

*After allowing for production to date, these are estimated reserves which the company feels can reasonably be considered as proved.



Report to the Shareholders

The earnings of Imperial Oil Limited for 1971 were \$136 million, compared to \$105 million for 1970. Taxes charged against income during the year totalled \$157 million.

The growth in earnings reflected improvement in all aspects of the company's operations. A major element in the improvement was increased crude oil sales, particularly in export markets, together with an increase in the price of western Canadian crude, the first significant rise in nearly 10 years. This price increase was part of a world-wide supply and demand pattern which is affecting energy costs on every continent.

Imperial refinery operations were at a high level of efficiency, and there was better realization from the sale of products. Performance improved in chemicals and building products.

Today's earnings are coming in large part from delayed realization on investments made over the past years in exploration and production facilities. Wells which were cut back for many years because of prorationing to market demand are now, with expanding crude sales, producing at closer to maximum capacity. This buoyancy in the producing end of our business should not be allowed to obscure the necessity of obtaining adequate returns in every phase of our operations.

The increase in earnings during 1971 is most encouraging in view of the very large investments

the company faces during the next decade—for environmental protection, for exploration and development in the frontier areas, and for the ever-increasing requirement for capital investments to meet the growing demand for energy. For instance, we already have under way a quarter-billion dollar construction and expansion program in our petroleum products operations. If major discoveries are made in the frontier areas, further large commitments will have to be undertaken to develop these finds and get them to market. To finance these expenditures, both from internally generated funds and from investors, the company must achieve a satisfactory return on capital investment, which is only now returning to the level of some 15 years ago.



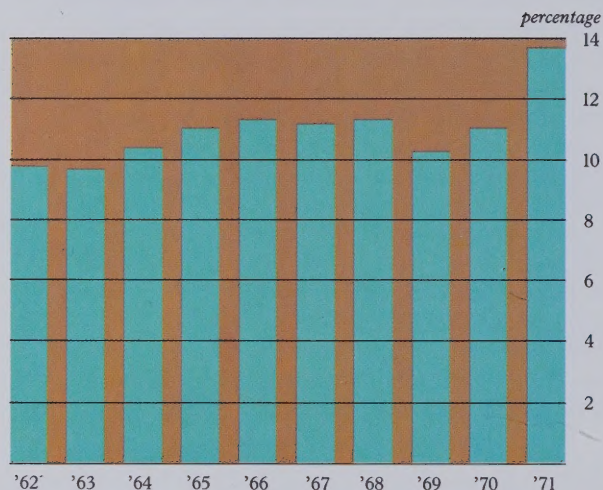
In the Annual Report one year ago, mention was made of the pressures exerted by the major producing countries to increase their revenues from crude oil exports. These pressures resulted in the Teheran agreement of last February when the Organization of Petroleum Exporting Countries (OPEC) and the major oil companies which discovered and developed most of the oil reserves in those states reached a five-year agreement which substantially increased the OPEC nations' revenues and provided for a yearly escalation to take care of inflation. Before the year was out the parties were back at the table again, because the producing countries wanted further compensation for the devaluation of the United States dollar, and obtained

it. Of particular importance to Imperial because the imported crude oil used at Montreal and Dartmouth refineries comes from Venezuela, that country has

Opposite page, lower left: W. O. Twaits, chairman (on left), and R. G. Reid, senior vice-president, visit control room of new coker complex at Sarnia refinery. Russell J. Wilkinson is seated at the control console. Centre: Sedco I, semi-submersible drilling platform which Imperial and another company are using in joint exploration program on the Grand Banks. Below: University of Calgary researchers conduct experiments on biodegradability of oil in Arctic conditions. Imperial contributed to this research. Bottom of page: The new gas plant at Quirk Creek in southern Alberta came on stream during 1971.



EARNINGS AS A PERCENTAGE OF
SHAREHOLDER INVESTMENT



once more increased its taxation rate on oil exports.

The result of these negotiations and tax escalations has been an increase in petroleum costs to all importing countries. This is a world-wide phenomenon, affecting every nation. For instance, the average price to Imperial of a barrel of Venezuelan crude oil has gone up 26 per cent since April, 1971.

Another corollary of the world-wide increase in crude oil costs is that Canadian oil has become more attractive in the United States, and exports to that market have been rising. In 1971 they reached 749,000 barrels per day, an increase of 12 per cent over 1970. For the second consecutive year, estimated recoverable reserves in Canada diminished, reflecting

not only the higher rate of production but also the fact that there has been no major oil discovery in western Canada since 1965. Nevertheless, remaining reserves still amount to about 18 years of supply at current production rates.

The rising value of Canadian crude oil has led to one increase in price, and could lead to others, as the share of United States demand met by its own domestic production continues to shrink. It is estimated that by 1980 that country will be importing 57 per cent of its requirement of crude oil and products, so Canadian producers, after decades of tight prorationing, are at last able to operate their fields at rates closer to the maximums imposed by conservation practices. Crude oil and natural gas exports were worth in excess of one billion dollars in 1971, a notable contribution to the total national product.

The need for additional reserves has led to the increased pace of exploration activity in Canada's frontier areas—along the Beaufort Sea near the mouth of the Mackenzie River, in the Arctic



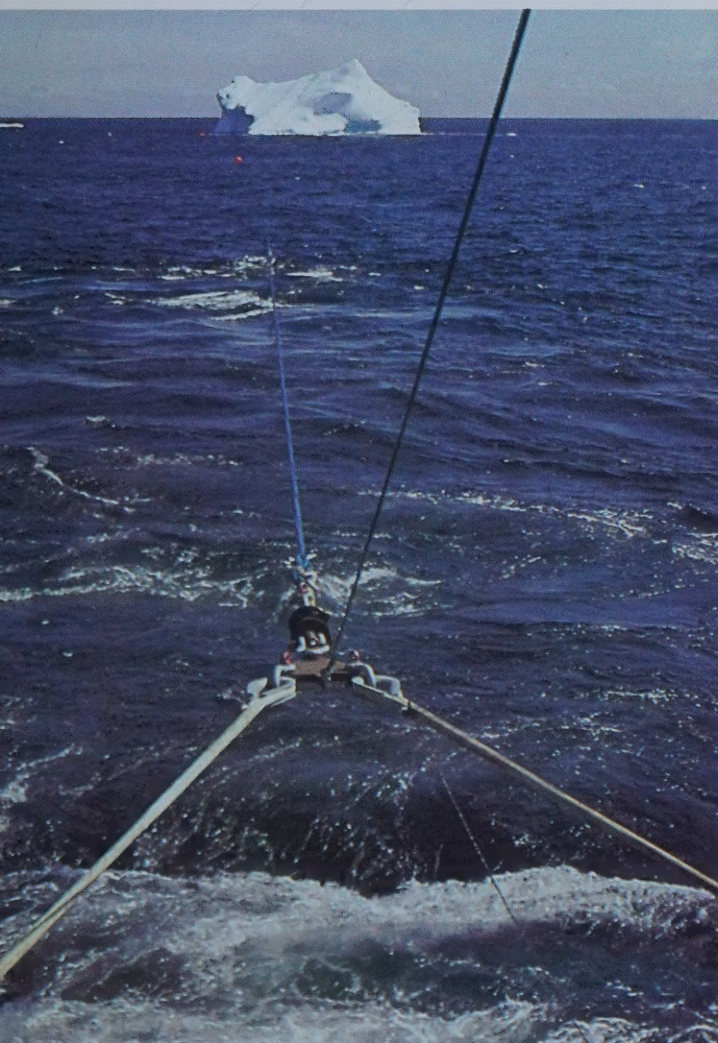
Islands, and off the east coast. Imperial is participating in all three areas. In the Beaufort Basin, where the company is drilling some 10 or 11 wells this winter, we have been encouraged by discoveries, particularly in the region surrounding the delta of the Mackenzie River. In early 1972, the Taglu West P-03 well, three miles west of the 1971 Taglu G-33 discovery, was penetrating a reservoir section similar to the discovery well. The Mallik L-38 well, 8½ miles northeast of the Taglu discovery, opened up several hundred feet of gas in two separate groups of reservoirs.

Imperial is drilling in the Arctic Islands on a farmout from Panarctic Oils Ltd., and, in association with Amoco Canada Petroleum Company Ltd., the company is continuing exploration drilling in shared acreage on the Grand Banks. Imperial also has 46 million acres of wholly-owned permits in the Atlantic which we will begin to explore in 1972. Discoveries by other operators in the Arctic Islands and off the east coast support the geological evaluation of those areas for new reserves of

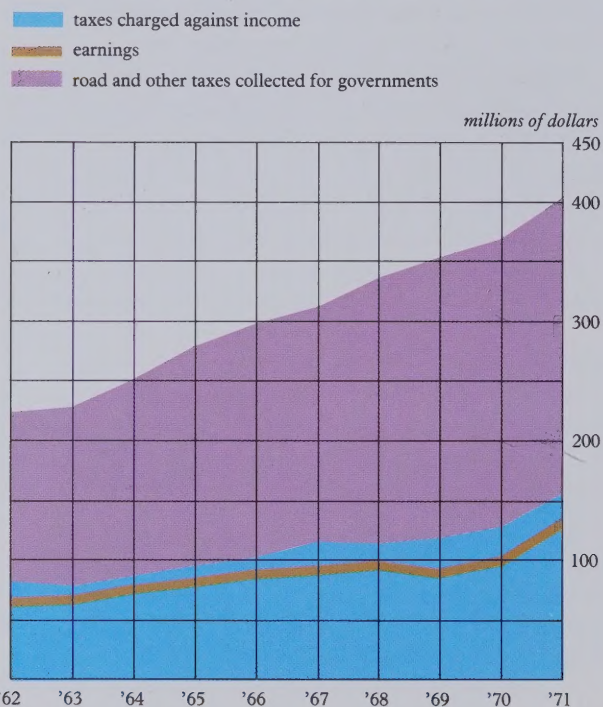
natural gas and crude oil.

Exploration and development expenditures in the frontier areas will surpass anything the industry has experienced so far in western Canada, because these potential supply sources are both in difficult physical environments and far from markets. If crude oil and natural gas are discovered in commercially attractive quantities—and it is our expectation, of course, that they will—not only does geography impose higher costs for developing the discoveries, but it will also oblige

Opposite page, lower left: Imperial president J. A. Armstrong (on right), with John Steen, chairman of the Tuktoyaktuk, N.W.T., hamlet council. Opposite page, lower right: J. C. Mah, member of the production and research technical services laboratory at Calgary, carries out research on drilling mud for Arctic operations. Below left: Imperial, with other companies, sponsored tests on feasibility of towing icebergs away from drilling platforms in prospective offshore oil producing areas. Below right: During the year the company contributed to research by the University of Alberta on tundra revegetation.



COMPANY EARNINGS COMPARED WITH TAXES*



*In addition, the company paid \$33 million to governments for oil and gas royalties and to acquire and retain exploration rights.

the construction of environmentally compatible transport facilities, including undersea pipelines and ice-strengthened tankers.

Canadian domestic petroleum demand, although growing steadily, would not by itself offer a market large enough to support such undertakings. The industry must be able to rely on exports to

the United States if it is to undertake the financial commitments necessary to unlock the petroleum potential in the north and the offshore areas.

Some estimates of these costs have been made. To add new oil and gas reserves to meet both domestic requirements and export opportunities, to provide facilities to move oil and gas from the frontiers to market, and to add and maintain refining, distribution and marketing facilities, it is calculated the industry will spend some \$25 to \$30 billion during the present decade. The comparable figure for the sixties was \$10 billion.

There are reasonable grounds for optimism that the physical and financial problems can be solved, and that a ready market will be available for all the crude oil and natural gas that can be produced, but this assumes government policies, both at the federal and provincial level, that will encourage this enterprise. It also assumes that federal and provincial policies will be harmonized so that industries like ours, affected by the decisions of both jurisdictions, will not be hampered by lack of agreement between the two levels of authority.

One possible source of difficulty could be in attitudes toward resource development. It is now being argued that, for a country like Canada, resource development should be discouraged in favor of manufacturing. The theory is being advanced that only manufacturing can provide the employment opportunities required for Canada's growing labor force, and therefore capital should be channelled into manufacturing



facilities rather than extractive facilities.

This theory could be very harmful for Canada because it overlooks several things. It overlooks the necessity for markets of economical scale, a lesson learned long ago by Imperial, which is a major manufacturer in its own right, not only of petroleum products but also of chemicals, fertilizers, plastics and building materials. Manufacturing depends on demand; it does not create it.

This theory also overlooks the spotty record of regional efforts to stimulate manufacturing by capital advances and subsidies.

Above all, it overlooks the strong support that successful resource development gives to secondary, tertiary and service industries. The most notable example of this is what happened

following the discovery of oil in western Canada. Oil industry expenditures had a cascade effect which reached into every corner of the economy, and not only in the west. The Prairies area became a better market not only for heavy industrial equipment but, with its population growing, for every article manufactured in Canada, from skates to automobiles. While the effect was felt in every part of the nation, it is no coincidence that the lowest unemployment rate in Canada has been the very area where the oil development was centred.

The western experience clearly demonstrates far more effectively than theoretical arguments that the job potential of resource industries cannot be measured simply by the number directly employed, or the revenue contribution limited to the federal income tax yield. Lease costs, production royalties and bonuses also accrue to governments, and in the frontier areas the government which would be the beneficiary of these revenues is the federal government.

Imperial announced during 1971 its plans for a completely revamped refining and distribution network on the Prairies, which involved the construction of a large 140,000 barrel per day refinery at Strathcona outside Edmonton and the eventual closing out of small refineries at

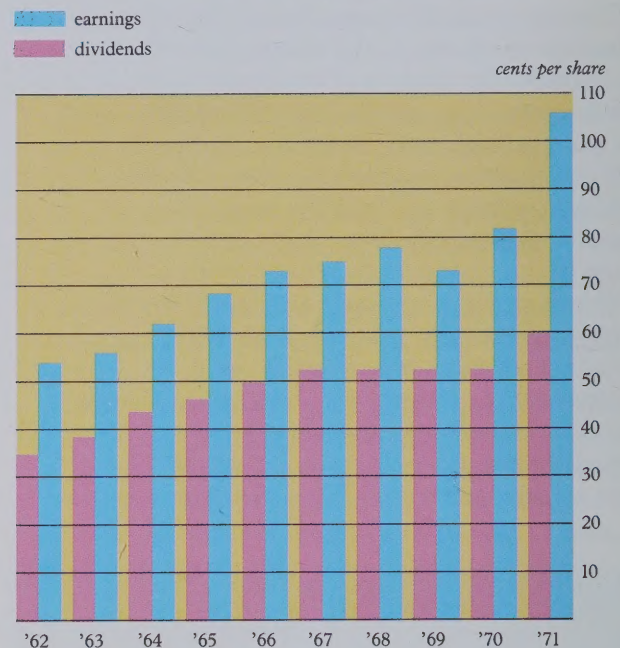
Opposite page: To supply heavy water plant at Douglas Point, Ont., Imperial instituted Canada's first continuous unit train movement of oil. Tank cars for the train are loaded from new rack facilities at Imperial's Montreal East refinery. Left: D. W. Murray tests sample of Unirex grease, new long-lasting lubricant developed by Imperial's research department. Below: J. G. Livingstone, senior vice-president, watches as driver W. J. Jackson uses new bottom-loading facilities for tank trucks at the Toronto marketing distribution centre.



Winnipeg, Regina and Calgary, and their replacement by product terminals. What finally determined the decision to undertake this project, which will cost more than \$200 million, was the effect of government policies on environmental protection, not only concerning the refining units themselves but also in the forthcoming requirement for low-lead and lead-free gasolines. The competitive economics arising from these requirements pointed directly to the need for a consolidation of refining facilities to achieve the necessary efficiencies in pollution controls and in processing costs. During the three-year construction period the existing refineries will continue to operate, and the company took special care to explain to the employees of those refineries the steps it will take on their behalf during and at the conclusion of the period. Some will be offered positions in the new refinery and other company operations, some will retire, and we will be working closely with the federal department of manpower and immigration and the provincial departments of labor to find suitable employment for the others. As a result of these efforts, we are confident the employment disruption will be held to a minimum. This endeavor has high corporate priority.

Canada's chemical industry continues to operate in an adverse climate, open to world-scale competition by the Kennedy Round tariff reductions, but with restricted opportunities in its nearest export market because of high U.S. customs duties. Despite this, Esso Chemical Canada improved its sales revenues by five per cent, with marked improvement in the sales of ethylene and of fertilizers. Imperial believes that, in Canada's interest, a national chemical policy, consistent with Canada's long-term industrial objectives, should be developed to halt the erosion of this important industry.

EARNINGS AND DIVIDENDS PER SHARE



Imperial employees represent a wide cross-section of skills and professions. Consequently the company is continually examining its compensation plans and work practices. During 1971, several improvements were made in the employee benefit package, including alterations in the pension plan to bring it in line with changing conditions. At some locations, employee groups are voluntarily experimenting with a shorter and variable work week. In addition, the company is actively pursuing various programs of innovative improvement in work practices and personnel development which, through increased job satisfaction, have contributed largely to gains in operating efficiency.

W. O. Twaits,
Chairman and Chief Executive Officer

Imperial Oil Limited
and Subsidiary Companies

Consolidated
Financial Statements

For the years 1971 and 1970
together with
Ten Year Financial
and Operating
Summary

Auditors' Report

To the shareholders of
IMPERIAL OIL LIMITED

We have examined the Consolidated Statement of Financial Position of Imperial Oil Limited and its subsidiary companies as at December 31, 1971 and the Consolidated Statements of Earnings and Source and Use of Funds for the year then ended. Our examination was made in conformity with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion these consolidated financial statements present fairly the financial position of the companies as at December 31, 1971 and the results of their operations and the source and use of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Price Waterhouse & Co.
Chartered Accountants
Toronto
March 2, 1972

Imperial Oil Limited and Subsidiary Companies

| CONSOLIDATED STATEMENT OF EARNINGS FOR THE YEARS 1971 AND 1970 | 1971 | 1970 |
|--|---------------------|--------------|
| | millions of dollars | |
| Revenues | | |
| Sales and other operating revenues | \$1,907 | 1,680 |
| Investment and other income | 34 | 31 |
| | <u>\$1,941</u> | <u>1,711</u> |
| Expenses | | |
| Crude oil, products and merchandise purchases | \$1,115 | 987 |
| Operating, exploration and administrative expenses | 447 | 411 |
| Depreciation and amortization | 74 | 67 |
| Income taxes (Note 4) | 80 | 58 |
| Taxes, other than income taxes | 77 | 71 |
| Interest and discount on long term debt | 12 | 12 |
| | <u>\$1,805</u> | <u>1,606</u> |
| Earnings for the Year | <u>\$ 136</u> | <u>105</u> |
| per share | \$ 1.06 | .82 |

| CONSOLIDATED STATEMENT OF SOURCE AND USE OF FUNDS FOR THE YEARS 1971 AND 1970 | 1971 | 1970 |
|--|---------------------|------------|
| | millions of dollars | |
| Source of Funds | | |
| Funds from operations (earnings plus depreciation, amortization and deferred income taxes) | \$ 178 | 178 |
| Capital stock issued | 1 | 1 |
| Sales of property, plant and equipment | 11 | 11 |
| Decrease (increase) in long term receivables, investments and other assets | (12) | (12) |
| | <u>\$ 178</u> | <u>178</u> |
| Use of Funds | | |
| Capital expenditures for property, plant and equipment | \$ 94 | 94 |
| Dividends paid | 68 | 68 |
| Reduction of long term debt | 5 | 5 |
| | <u>\$ 167</u> | <u>167</u> |
| Increase in Working Capital | <u>\$ 11</u> | <u>11</u> |

The Notes to the Financial Statements are a part of these statements.

Imperial Oil Limited and Subsidiary Companies

NOTES TO THE FINANCIAL STATEMENTS

ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of Imperial Oil Limited and its subsidiary companies, all of which are wholly owned. Investments in other companies are carried at cost and dividends are recorded in income as declared.

Depreciation and Amortization

Depreciation of plant and equipment is based on the estimated service lives of the assets, calculated on the straight-line method. Amortization of producing well costs and of capitalized producing lease costs is determined on the unit of production method.

Exploration

Exploration expenditures including costs of acquisition and retention of exploration acreage, geological and geophysical surveys, and unsuccessful drilling are charged against current earnings except to the extent they relate to the acquisition of acreage expected to be productive, based on the companies' past experience.

Income Taxes

Income taxes charged in the earnings statement are computed on the tax allocation basis except for the effect of producing well costs, for which tax allocation is not generally applied in the oil and gas industry.

Inventories

Inventories are priced generally at the lower of average annual cost and net realizable value.

| 1. Property, Plant and Equipment | 1971 | 1970 | 1971 | 1970 |
|-------------------------------------|---------------------|-------|--|------|
| | Cost | | Accumulated depreciation and amortization | |
| | millions of dollars | | | |
| Exploration and production | \$ 542 | 498 | 223 | 212 |
| Refining petroleum products | 471 | 437 | 282 | 269 |
| Chemical and building products | 186 | 184 | 84 | 70 |
| Marketing | 345 | 329 | 129 | 118 |
| Transportation | 148 | 147 | 75 | 71 |
| Other | 34 | 30 | 11 | 10 |
| Total | \$1,726 | 1,625 | 804 | 750 |
| Net investment | \$ 922 | 875 | | |

The charge against earnings in 1971 for amortization of producing well costs and capitalized producing lease costs amounted to \$8 million and the accumulated provision at December 31, 1971 amounted to \$135 million.

| 2. Long Term Accounts Receivable, Investments and Other Assets | 1971 | 1970 |
|---|----------------------------|-------|
| | <i>millions of dollars</i> | |
| Long term accounts receivable | \$ 64 | 68 |
| Investment in other companies, at cost: | | |
| With quoted market value | 1971 1970 | 16 16 |
| | \$262 247 | |
| Without quoted market value | 9 | 7 |
| Funds on deposit with governments and others | 9 8 | |
| Deferred charges | 3 4 | |
| | \$101 | 103 |

| 3. Long Term Debt | 1971 | 1970 |
|--|----------------------------|------|
| | <i>millions of dollars</i> | |
| Imperial Oil Limited | | |
| 3 ³ / ₈ % Sinking Fund Debentures, 1955 Issue, maturing February 1, 1975 | \$ 23 | 25 |
| 6 ³ / ₄ % Sinking Fund Debentures, 1967 Issue, maturing January 2, 1987 | 45 | 48 |
| 7 ¹ / ₄ % Serial Debentures, 1968 Issue, maturing January 2, 1976 | 10 | 10 |
| 7 ³ / ₄ % Sinking Fund Debentures, 1968 Issue, maturing January 2, 1988 | 40 | 40 |
| 8 ¹ / ₂ % Sinking Fund Debentures, 1969 Issue, maturing August 15, 1989. This issue is subject to the holders' option to require prepayment of principal on August 15, 1974. | 50 | 50 |
| | \$168 | 173 |
| Amount due within one year | 2 | — |
| | \$166 | 173 |

Sinking fund and maturity payments required in the next five years on the above debentures are \$2 million in 1972, \$5 million in 1973, \$7 million in 1974, \$27 million in 1975 and \$7 million in 1976.

In February, 1972, the company received the proceeds from the issue of \$15 million 6⁷/₈% Serial Debentures maturing \$2,500,000 annually from February 15, 1976 to 1981 inclusive and \$35 million 7³/₄% Sinking Fund Debentures maturing February 15, 1992. Sinking fund requirements are \$2,500,000 in each of the years 1982 to 1991 inclusive.

4. Income Taxes

Deferred income taxes were recorded in the amount of \$11 million in 1971 and \$6 million in 1970. The accumulated amount of deferred income taxes in respect of producing well costs, for which tax allocation is not followed, would have been \$38 million at December 31, 1971; the effect on earnings and deferred income taxes in this regard in 1971 and 1970 was not significant.

In 1968, the company was assessed for income tax on the gain realized in 1963 on the disposal of natural gas storage rights and facilities. As required by law the company has paid the tax of \$4 million including interest and, on the advice of counsel, is contesting the assessment. This payment has been included in 'Funds on deposit with governments and others' (Note 2). No income tax provision has been made for this item.

The operations of the companies are complex and the related income tax interpretations, regulations and legislation are continually changing. As a result, there are usually some tax matters in question. The companies have made what they believe are adequate provisions for income taxes payable.

5. Capital Stock

Under the company's 1959 and 1965 Incentive Stock Option Plans employees may be granted options to purchase unissued common shares of the company at not less than 95 per cent and under the 1970 Plan at not less than 90 per cent of the market price on the date of granting the options. As of December 31, 1971 there were outstanding options for shares exercisable at prices ranging from \$10.778 to \$22.950. Options for 761,492 shares may be exercised currently, and for 314,979 shares after July 15, 1972, and for 165,469 shares after July 15, 1973. Included in the above are 414,277 shares under option to directors and officers. In 1971, the company issued 510,806 shares for \$8,005,000 all under the terms of the Plans.

6. Amounts Owing to and from Affiliated Companies

At December 31, 1971 balances owing to and from affiliated companies, all of which arose in the normal course of operations, were \$26 million and \$5 million respectively.

7. Employee Retirement Plans

The companies have a number of retirement plans covering substantially all employees. The principal plan was revised November 1, 1971 to provide improved benefits. As a result it is estimated that liabilities under the plan exceed the value of assets held by the trustees. An actuarial valuation to determine this position is currently in progress and any shortage in respect of past services will be provided over a period of not more than 17 years.

8. Remuneration of Directors and Officers

The aggregate remuneration of nine directors and three past directors of the company, when serving as both directors and officers in 1971 was \$1,054,000, and of eight other officers, when serving only as officers, was \$246,000. All directors and officers are full-time employees of the company and received no remuneration from the company's subsidiaries.

9. Contingencies and Commitments

The company has entered into a contract for the construction of the main portion, estimated to cost \$170 million, of a major refining facility in Strathcona, Alberta.

The company has guaranteed or otherwise agreed to protect obligations of others in the aggregate principal amount of \$25 million. Rentals and commitments payable by the companies under long term agreements approximate \$20 million annually.

TEN YEAR FINANCIAL AND OPERATING SUMMARY (dollars in millions except per share and per employee amounts)

***In North America, the barrel is the standard unit of measurement for large volumes of liquid petroleum. One barrel contains 34.972 Imperial gallons.

Imperial Oil Limited and Subsidiary Companies

| CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 1971 AND 1970 | | 1971 | 1970 |
|--|--|---------------------|--------------|
| | | millions of dollars | |
| ASSETS | | | |
| Current Assets | | | |
| Cash, including time deposits | | \$ 78 | 44 |
| Marketable securities, at the lower of cost and market | | 8 | 18 |
| Accounts receivable | | 343 | 325 |
| Inventories: | | | |
| Crude oil, products and merchandise | | 171 | 165 |
| Materials and supplies | | 1 | 18 |
| Prepaid expenses | | 7 | 7 |
| Total current assets | | \$ 612 | 577 |
| Property, Plant and Equipment , at cost less accumulated depreciation and amortization (Note 1) | | 922 | 875 |
| Long Term Accounts Receivable, Investments and Other Assets (Note 2) | | 101 | 103 |
| Total Assets | | <u>\$1,648</u> | <u>1,555</u> |
| LIABILITIES AND DEFERRED CREDITS | | | |
| Current Liabilities | | | |
| Bank loans | | \$ 5 | 2 |
| Short term notes | | 43 | 45 |
| Accounts payable and accrued liabilities | | 200 | 188 |
| Income and other taxes payable | | 39 | 30 |
| Total current liabilities | | \$ 287 | 265 |
| Long Term Debt (Note 3) | | 166 | 173 |
| Employee Annuity and Contingent Obligations | | 13 | 13 |
| Deferred Income Taxes (Note 4) | | 144 | 133 |
| Total Liabilities and Deferred Credits | | <u>\$ 610</u> | <u>584</u> |
| SHAREHOLDERS' INVESTMENT | | | |
| Capital Stock (Note 5) | | | |
| Authorized—160,000,000 shares of no par value | | | |
| Issued 1971—129,104,873 shares: 1970—128,594,067 shares | | \$ 268 | 260 |
| Earnings Retained and Used in the Business | | | |
| At beginning of year | | \$ 711 | 674 |
| Earnings for the year | | 136 | 105 |
| Dividends paid | | (77) | (68) |
| At end of year | | \$ 770 | 711 |
| Total Shareholders' Investment | | <u>\$1,038</u> | <u>971</u> |

The Notes to the Financial Statements are a part of this statement.

Approved by the Board.

W. W. Maib

Operations Review

1971 was a year of highlights for Imperial Oil.

© Important oil and gas discoveries were made in the Arctic, and the pace of exploration in that area and on the Grand Banks was stepped up.

© Production of crude oil and natural gas reached record levels.

© Volumes of petroleum products refined increased again, and operations were at a high level of efficiency.

© Construction projects for refining and associated facilities, representing an investment of more than a quarter of a billion dollars, were initiated.

Exploration and Production

The company's oil and natural gas exploration effort in the frontier areas continued to expand during 1971.

In early May Imperial announced that oil and gas had been discovered at a depth of 3,800 feet at its Mayogiak P-17 well on the Tuk Peninsula in the Beaufort Basin in the Arctic. This well is located some 80 miles north and east of Inuvik. On June 17, it was announced that during a drill stem test at the same well light gravity crude flowed to the surface from a depth of 9,400 feet. Four days later the company recovered natural gas and condensate at its Taglu G-33 well on Richards Island in the Mackenzie Delta, some 50 miles west of the Mayogiak P-17 discovery, and announced that "a large gas flow was recovered during a drill stem test at about 8,100 feet."

Following completion of the wells, drilling was suspended for the summer. (In order to protect the tundra, the company does not carry out exploration involving overland movement on the Arctic mainland

during the summer months.) During the summer two additional rigs and supplies for the winter program were barged down the Mackenzie to staging areas, and seismic exploration was carried out in the Beaufort Sea.

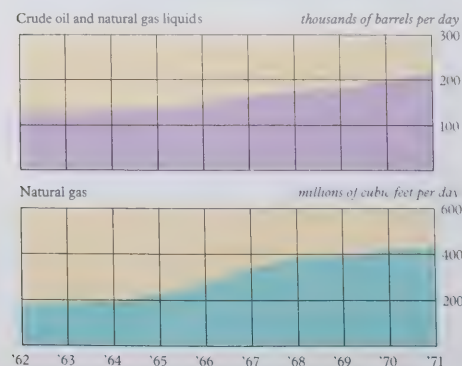
With the advent of winter both land seismic work and exploratory drilling were resumed in the vicinity of the Taglu and Mayogiak discoveries. Five rigs began work and are expected to drill or start drilling 10 or 11 wells during the winter months. In addition, under a farmout agreement with Panarctic Oils Ltd., the company undertook to conduct an exploration program consisting of seismic work and drilling in the Arctic Islands. By late 1971 seismic work had been carried out and drilling begun on one well.

Off the east coast Imperial, in association with Amoco Canada Petroleum Company Ltd., drilled three wells on the Grand Banks. A second semi-submersible rig, similar to that now in use, will go into operation this spring. Seismic work was carried out during the year in the Flemish Cap area northeast of the Grand Banks and on the Banks themselves.

Imperial and Amoco jointly hold 37 million permit acres on the Grand Banks and Flemish Cap. Imperial holds an additional 46 million acres in the Atlantic offshore region off the Labrador, Newfoundland and Nova Scotia coasts. Twenty-four million of these, some 200 miles off the Newfoundland and Nova Scotia coasts, were acquired in 1971. Plans call for seismic surveys to be undertaken this summer in these three areas.

Imperial's search for metallic mineral deposits was expanded during the year with crews active in seven of the 10 provinces, in the Yukon and the Northwest Territories. At year end diamond drilling was

GROSS PRODUCTION CRUDE OIL AND NATURAL GAS



planned for 22 projects with emphasis on copper prospects in British Columbia, Quebec and Nova Scotia.

Gross production of crude oil and natural gas liquids totalled 213,000 barrels per day in 1971, an increase of seven per cent over the previous year. Gross production of natural gas increased five per cent to 433 million cubic feet per day.

Imperial's production investments during the year were focussed on expansion of facilities to permit increased crude oil production to meet rising demand. At Redwater a second gas conservation plant went on stream, and treating and gathering systems were expanded. At Judy Creek, in west central Alberta, a third gas conservation plant went into operation and the water injection system and gathering and treating facilities were also expanded. The plants are owned by Imperial and other

companies in the area and operated by Imperial. In southern Alberta the Quirk Creek gas plant, which Imperial operates and in which the company

Opposite page: D. R. Stahr conducts tests on Imperial's new \$400,000 biochemical lagoon at Winnipeg refinery. Waste water is treated in lagoon before discharge to nearby Red River. This page, left: J. H. Hamlin, senior vice-president, inspects core samples taken by minerals exploration party working near Truro, N.S. Below: Following successful introduction in Canada, 'Stretch 'n Seal' food wrap is being marketed in the U.S. and other countries under licence from Imperial. Bottom of page: As part of Imperial's oil spill containment and clean-up program Edmonton refinery employees practice putting boom in place on North Saskatchewan River.



has a 49 per cent interest, came on stream early in the year allowing this field, discovered in 1967, to go into production.

With the forecast growth in long-term energy demands, the company resumed experimental work on producing heavy oil at Cold Lake, Alta. Construction of a pilot plant was completed late in the year and steam injection operations were begun in 1972. Syncrude Canada Limited, in which the company has a 30 per cent interest, applied to the Alberta Energy Resources Conservation Board for approval to expand capacity of its proposed plant in the Athabasca Tar Sands area from 80,000 to 125,000 barrels per day. The board recommended to the Alberta government that the application be approved: in February, 1972, provisional approval was granted.

Reflecting the shift in exploration emphasis to the frontier regions, and the maturity of the company's production operations in the western provinces, during 1971 Imperial began consolidating its western producing functions into regional headquarters in Calgary. The company's office building in that city is currently undergoing a \$3 million expansion to accommodate exploration and production personnel who are moving there from other points.

Below: At meeting of corporate managers, senior vice-president Ronald S. Ritchie discusses aspects of company sensitivity and response to socio-political developments. Shown here are T. Housser, Atlantic region (far left); C. L. Goddard, Pacific region; U. J. Chaput, Prairie region; Mr. Ritchie, and W. B. Dingle, Alberta. Opposite page, left: Esso Chemical Canada's ethylene facilities at Sarnia, Ont., were expanded in 1971. Far right: B. Dielissen of Poli-Twine Corp. Ltd. demonstrates polypropylene rope, developed for logging industry.

Transportation

The new 2,045 deadweight ton bunkering barge 'Imperial Dartmouth' went into service in Halifax harbor early in the year.

In late November the company instituted Canada's first continuous unit train movement of oil. The single-purpose train, operated by Canadian National Railways, moves heavy fuel oil from Imperial's Montreal East refinery to the Atomic Energy of Canada Limited heavy water plant at Douglas Point, Ont. When fully operational the train will run round the clock, taking 72 hours to complete the 1,200-mile round trip, including time for loading, unloading and inspection.

In December the company called for tenders for the construction of a new tanker to serve the west coast. Construction was originally scheduled for mid-1972, but the project was moved ahead in order to stimulate additional employment during the winter months. The new vessel, as yet unnamed, will be 143 feet long with a carrying capacity of 200,000 gallons of product. It is expected to go into service next autumn and will replace the 34-year-old 'Imperial Nanaimo'. In addition to moving the tanker project ahead, the company also placed orders for more than one million dollars' worth of tank trucks that had been scheduled to be bought later in 1972. These custom-built facilities have a high labor content and their construction will utilize many skilled seasonal workers.

Petroleum Products

Imperial's refineries, operating at close to capacity with total throughput averaging 412,000 barrels per day, were at a high level of efficiency.

To meet increasing demand for petroleum products, and anticipated as well as present environmental protection requirements for both products and plant operations, the company embarked



on a country-wide refinery investment program of more than a quarter of a billion dollars.

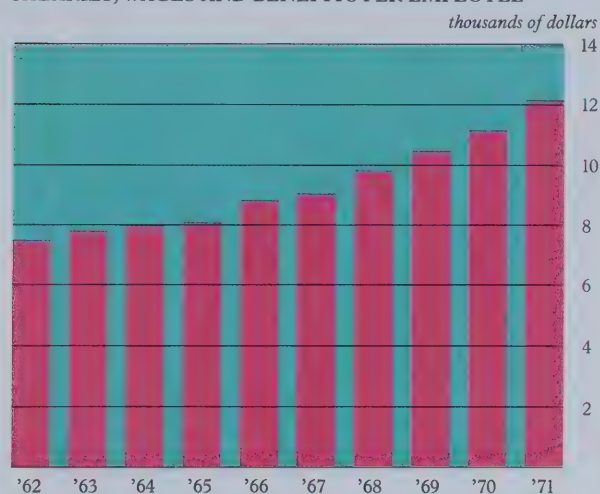
In September Imperial announced it would spend more than \$200 million to build a new petroleum product supply system on the Prairies. The construction project will be one of the largest ever undertaken in western Canada. More than 2,000 workers will be employed directly during the peak of construction and additional thousands will be employed in firms providing materials and services.

Heart of the new system will be a refining complex to be built on the site of the company's present Edmonton refinery. The Strathcona refinery, as the new plant will be called, will have a crude oil processing capacity of 140,000 barrels per day and will be able to supply Imperial's petroleum product requirements in the Prairies. A pipeline system will link the new plant with product terminals at major Prairie centres. To assure uninterrupted supply to customers, present Imperial refineries in Calgary, Regina and Winnipeg will remain in operation until the terminals in those cities go into service.

In December Imperial announced a \$17 million program at its Sarnia refinery to install new facilities to produce greater volumes of high performance gasolines. The largest facility to be installed will be a 7,500 barrel per day alkylation unit which will increase the refinery's capacity to meet future quality requirements for Esso gasolines. The new units are expected to go into operation by mid-1973. An earlier program to expand the refinery's lubricating oil manufacturing capacity by 50 per cent will be completed in 1972.

At Imperial's Dartmouth, N.S., refinery, the company began a \$10 million construction project to expand capacity and to install additional

SALARIES, WAGES AND BENEFITS PER EMPLOYEE



environmental protection equipment. Construction will be completed in 1972, increasing capacity from 60,000 to 75,000 barrels per day. At the company's Montreal East refinery, contracts were let to build additional hydrofining facilities for sulphur removal. The new units, which will cost some \$5 million, will be completed toward the end of 1972.

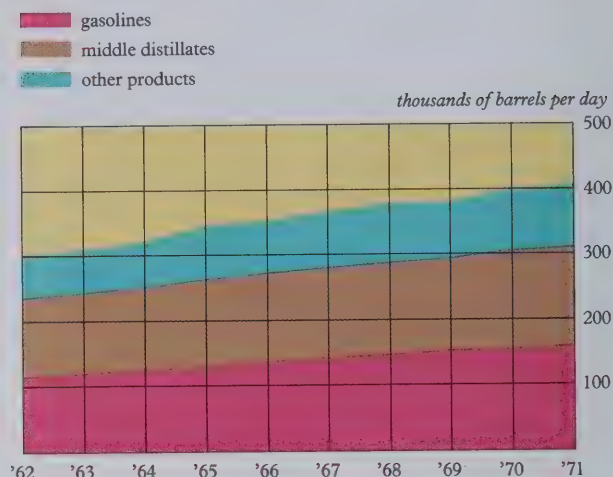
Firmer product prices and increased operating efficiency resulted in improved realization from sales of petroleum products.

In response to good customer acceptance, Imperial continued to expand its chain of Econo stations that provide lower-priced gasoline and a variety of merchandise. Thirty-four of these are now in operation. Two more Esso self-serve stations were opened, one in St. Catharines, Ont., and the other in Windsor, Ont., bringing to five the number now in service.

Also in the automotive field the company added more fast-service tunnel car washes in major markets and now has 73 in operation across Canada. Use of the Esso credit card was further extended to include Howard Johnson Motor Lodges in Canada and the U.S. The company also expanded its chain of Voyageur restaurants and at the end of 1971 had 46 in service across the country.

The range of products was extended during the year with the national introduction of Unirex grease and of two specialty motor oils. Unirex is an all-purpose grease: test-marketed in several areas before national introduction, it has proved highly

PETROLEUM PRODUCT SALES



successful as a long-lasting lubricant. The motor oils, Ultramarine and Sno Trac Extra, are specially formulated for boats and snowmobiles respectively. Customer reaction to both has been good.

In the home products market, the company's 'Stretch 'n Seal' food wrap achieved a high level of consumer acceptance. The polyvinyl chloride wrap is also being marketed in the U.S. and other countries under licence from Imperial.

To provide better service to home fuel customers Imperial established a series of 'Home Comfort Centres' in Halifax, Ottawa, Toronto and Vancouver. The centres consolidate services previously offered by the company and by agents and are primarily company-operated. The program will eventually be put into effect in all major centres.

Chemical and Building Products

Adverse conditions bearing on the Canadian chemical industry continued to affect the company's chemical operations. In the face of these, Esso Chemical Canada increased its sales some five per cent over the previous year. A major factor was increased fertilizer sales: the Redwater, Alta., plants operated at close to capacity. Sales of ethylene also increased and facilities at the company's Sarnia petrochemical plant are being expanded to meet the rising demand for that product. Sales of polyvinyl chloride resins also improved. With the addition of new capacity for manufacturing petroleum product additives the division maintained its position as a leading supplier of these products.

Poli-Twine Corp. Ltd. and Polybottle Limited both achieved higher sales during the year. Poli-Twine, Canada's largest synthetic cordage company, developed new filler materials for wire



and cable and a new heavy-duty rope for the logging industry. Polybottle introduced a new family of plastic bottles to the consumer market.

Sales of Building Products of Canada Limited increased 11 per cent to \$57 million during the year, reflecting that company's strong position in the residential construction market. The company has developed a new light-weight phenolic foam material for use as a roof and wall insulator. Building Products is currently building a large pilot plant to produce this product, which appears to have outstanding fire-resistant qualities.

Research and Development

Imperial's research activities continued at a high rate during 1971. Among more than 200 new product formulations the research department at Sarnia developed two new waxes for use in waterproofing of corrugated cardboard boxes and a new vinyl chloride/vinyl acetate resin that has been successfully tested by a major phonograph record manufacturer. The department also developed the formulations for

the Ultramarine and Sno Trac Extra engine oils referred to earlier. Several new refining and chemical formulations were developed, including techniques to improve capacity at the PVC plant.

At Calgary, the company's production research and technical services laboratory assisted with the development of improved drilling and well-completion practices for the Arctic region, and in evaluating techniques for exploring offshore in the Arctic. The laboratory is also working closely with Mackenzie

Opposite page: K. R. Croasdale of production research and technical services laboratory measures ice forces in a series of tests carried out to assess the effects of ice on various types of offshore drilling structures. Below left: Imperial maintained its position as a leading supplier of petroleum product additives in 1971. Below: J. W. Hamilton, senior vice-president, D. W. McGibbon (left), treasurer, and J. F. Barrett, Q.C., general counsel (right), examine a company prospectus. Bottom of page: The company's chain of Econo stations was expanded in 1971. Thirty-four are now in operation.



Valley Pipe Line Research Ltd. toward the design of an environmentally compatible oil pipeline.

Environmental Protection

In 1971 Imperial engaged in a number of environmental protection projects, both on its own and in conjunction with other groups such as the Arctic Petroleum Operators Association.

Arctic research included feasibility of offshore drilling structures, and studies in drilling technology, ice strength, biodegradability of oil in Arctic conditions, tundra revegetation, and pipelines.

In the Atlantic, Imperial participated in a test program to measure the feasibility of towing icebergs

under certain conditions. This is of major importance should fixed offshore producing facilities be installed.

Improvements continued to be made and planned in all phases of the company's operations. Thirteen million dollars will be spent, for example, at the new Strathcona refinery on in-plant environmental protection facilities, and some \$20 million for facilities to produce lead-free and low-lead gasolines. A new \$400,000 biochemical reactor to treat waste water was installed at Winnipeg refinery during 1971. Included in the \$10 million construction program at Dartmouth (referred to earlier) are some \$4 million worth of facilities to reduce sulphur content in products and to continue control of sulphur emissions. During 1971 the company's expenditures for environmental protection totalled \$18 million. These are readily identifiable expenditures: they do not include the considerable environmental protection costs associated with the company's day-

Below: During board visit to British Columbia, J. A. Cogan, senior vice-president, chats with O. A. Hanson in Ioco refinery inspection laboratory. Right: Geology students conduct geophysical survey near Truro, N.S., to determine the presence of minerals. Some 500 students were employed by the company on summer work during 1971. Opposite page, above: New bunkering barge, 'Imperial Dartmouth', refuels freighter in Halifax harbor. Below left: Ultramarine motor oil, one of several new products introduced during 1971, is particularly formulated for outboard engines. Below right: Imperial's Mayogiak P-17 well on the Tuk Peninsula which discovered oil and natural gas in May, 1971.

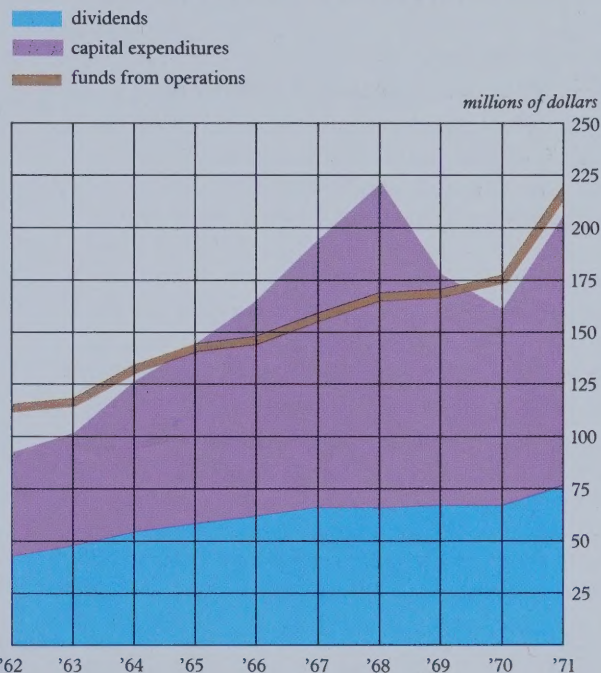


to-day operations in everything from Arctic drilling to marine transport.

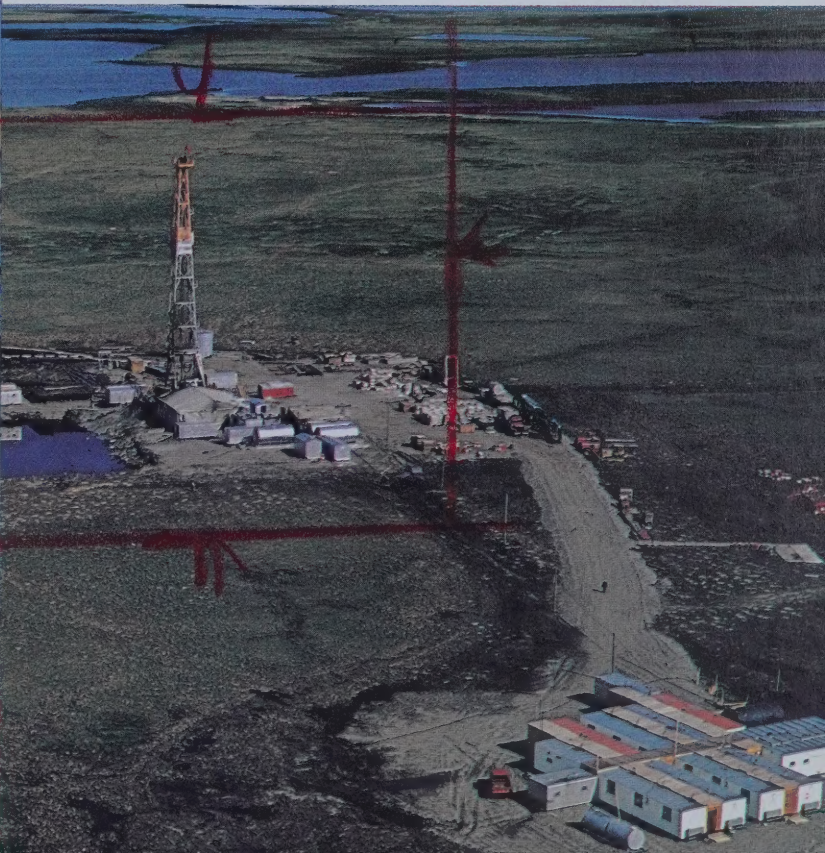
Imperial continued to place great emphasis on oil spill prevention in its operations and on clean-up capabilities. In the latter area the company is working vigorously not only on its own capabilities, but in setting up cooperative arrangements with other companies and with governments so that quick and effective measures can be taken in the event of accidents.



FUNDS FROM OPERATIONS COMPARED WITH DIVIDENDS AND CAPITAL EXPENDITURES



*(M per share
1 x 10)*



Property Development

Devon Estates Ltd., a wholly-owned Imperial subsidiary formed in 1947 to construct and manage real estate developments associated with company operations, announced plans for a moderate income housing development on company property in Calgary's Ogden district. The project is being developed in association with the Nu-West Development Corporation Ltd. of that city.

Village Lake Louise

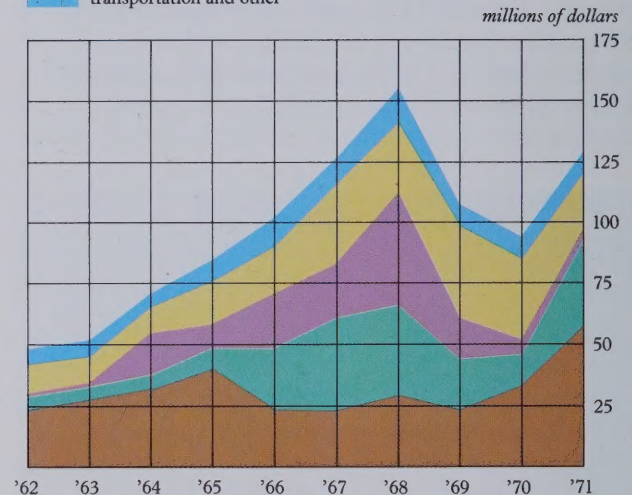
Imperial is engaged in a joint venture to establish resort facilities at Lake Louise in Banff National Park. Imperial and its partner, Lake Louise Lifts Limited, have formed a company called Village Lake Louise Ltd. to build the facilities. The company was formed following an invitation by the federal government for development of a suitable plan for meeting the service needs of the several million persons who visit the area each year. Great pains have been taken in the project to ensure that both the physical and biological environment will be protected and that the natural beauty of the area will be preserved. The federal government held public hearings on this project in early March, 1972.

Summer Employment

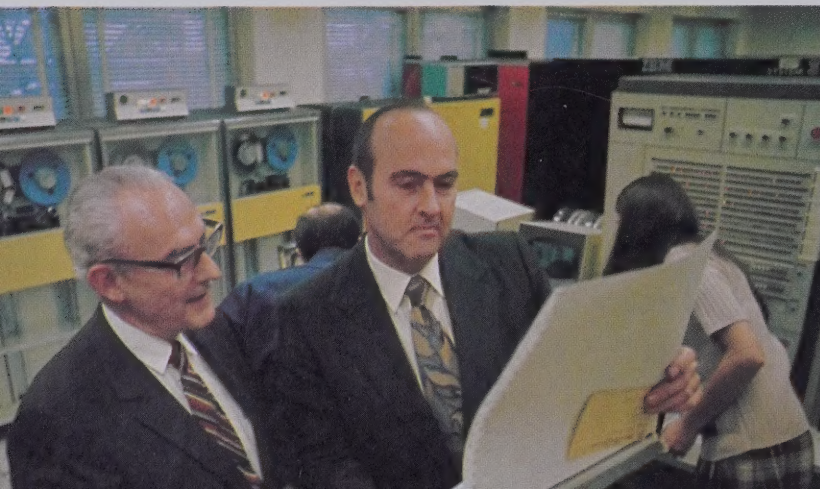
For many years Imperial has provided summer employment for students. In 1971 some 500 students were employed in company operations across Canada. Also in 1971, reflecting the general student summer employment situation, Imperial instituted a special program to provide jobs for students of post-secondary institutions. A total of \$250,000 was allocated to provincial and northern territorial governments which selected and paid approximately 250 students working in fields related to their particular area of study. Because the same employment situation persists, the company has undertaken a similar program for 1972.

CAPITAL EXPENDITURES

- exploration and production
- refining petroleum products
- chemical and building products
- marketing
- transportation and other



Below left: J. W. Flanagan (right), senior vice-president, with E. D. Kingsbury, manager, systems and computer services, in computer room at head office. Below: Coin atop phenolic foam insulation material is heated white hot to demonstrate fire-resistant properties of new product being developed by Building Products of Canada Limited. Opposite page, top: Imperial's exploration staging area at Tuktoyaktuk, N.W.T. Supplies and equipment rest on thick gravel pads laid to protect the tundra. Opposite page, bottom: Helicopter lowers supplies to Imperial seismic exploration campsite on Axel Heiberg Island in the high Arctic.







Le rapport annuel de l'Imperial Oil est publié en français et en anglais. Si vous préférez le recevoir en français de même que les autres communications à l'intention des actionnaires, veuillez en faire part par écrit à la Division des affaires des actionnaires, Imperial Oil Limited, case postale 4029, Toronto, Ontario.